IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1.      (Currently Amended) A hardware upgrade for a set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus, the hardware upgrade comprising:

an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade modem for ~~communicating with~~ providing communication between the hardware upgrade and one or more headends, wherein the set top terminal receives television program signals based on the subscriber input received from the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled to the modem of the hardware upgrade, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into a card receiving slot, the hardware upgrade microprocessor providing enhanced functional capabilities to the set top terminal; ~~and~~

processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received interactive input and for providing the generated responses to the microprocessor of the set top terminal; and

memory, coupled to the hardware upgrade microprocessor, for storing data therein;

wherein the hardware upgrade is a card insertable into the card receiving slot of the

set top terminal, the hardware upgrade microprocessor being coupled to a modulator and

demodulator to add a data modulation and demodulation function to the set top terminal such

that data may be retrieved by the modem of the hardware upgrade from the one or more

headends and stored in the memory of the hardware upgrade, wherein the data received by

the modem of the hardware upgrade comprises information from an interactive service for

accessing an on-line database thereby allowing a user to use the set top terminal to engage in

actual transactions using two-way communications over the modem of the hardware upgrade

with the interactive service via submenus provided by the hardware upgrade microprocessor

as an overlay to a program displayed by the microprocessor of the set top terminal;

wherein the hardware upgrade microprocessor upgrade processes data and

instructions stored in the memory of the hardware upgrade to provide enhanced functional

capabilities for the set top terminal and to process subscriber inputs received from the set top

terminal.

2-3.    (Canceled).

4.      (Currently Amended) The hardware upgrade of claim 1 wherein the modem

of the hardware upgrade is capable of communicating with the interactive service.

5.      (Original)      The hardware upgrade of claim 4 wherein the interactive

service is outside of the television program delivery system.

6.    (Original)    The hardware upgrade of claim 4 wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

7.    (Currently Amended) The hardware upgrade of claim 1 wherein the modem of the hardware upgrade is capable of communicating with the on-line database.

8.    (Original)    The hardware upgrade of claim 7 wherein the on-line database is outside of the television program delivery system.

9.    (Original)    The hardware upgrade of claim 7 wherein the on-line database contains data concerning one or more applications selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

10-13. (Canceled).

14. (Currently Amended) A set top terminal for use with a television program delivery system with menu selection of programs, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive programs; and

a first hardware upgrade comprising:

an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade modem for ~~communicating with~~ providing communication between the hardware upgrade and one or more headends, wherein the set top terminal receives television program signals based on the subscriber input received from the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled the modem of the hardware upgrade, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into an expansion card receiving slot, the hardware upgrade microprocessor providing enhanced functional capabilities to the set top terminal; ~~and~~

processing circuitry, coupled to the hardware upgrade processor, for receiving interactive input from the subscriber, for interpreting the received interactive input, for generating responses based on the received interactive input and for providing the generated responses to the microprocessor of the set top terminal; and

memory, coupled to the hardware upgrade microprocessor, for storing data therein;

wherein the first hardware upgrade is a card inserted into the expansion card slot of the set top terminal, the hardware upgrade microprocessor being coupled to a modulator and demodulator to add a data modulation and demodulation function to the set top terminal such that data may be retrieved by the modem of the hardware upgrade from the one or more headends and stored in the memory of the hardware upgrade,

wherein the interface comprises at least one card connector adapted for use with the expansion card slot, and

wherein the data received by the modem of the hardware upgrade comprises information from an interactive service for accessing an on-line database thereby allowing a user to use the set top terminal to engage in actual transactions using two-way communications over the modem of the hardware upgrade with the interactive service via submenus provided by the hardware upgrade microprocessor as an overlay to a program displayed by the microprocessor of the set top terminal.

15-17. (Canceled).

18.     (Original)     The terminal of claim 14 wherein the terminal is an HDN terminal.

19.     (Original)     The terminal of claim 14 further comprising:

one or more additional hardware upgrades connected to the terminal.

20-22. (Canceled).

23. (Original) The terminal of claim 19 wherein at least one of the one or more additional hardware upgrades is selected from the group consisting of an audio program reception hardware upgrade, an interactive hardware upgrade that receives interactive subscriber input and produces interactive output, and a storage hardware upgrade.

24. (Currently Amended) A system comprising:

a television program delivery system adapted to deliver television program signals; and

a set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus and comprising:

a receiver adapted to receive at least some of the television program signals; and

a hardware upgrade comprising:

an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

a hardware upgrade modem for ~~communicating with~~ providing communication between the hardware upgrade and one or more headends, wherein the set top terminal receives television program signals based on the subscriber input received from the microprocessor of the set top terminal;

a hardware upgrade microprocessor, coupled to the modem of the hardware upgrade, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware

upgrade is inserted into a card receiving slot, the hardware upgrade microprocessor providing

enhanced functional capabilities to the set top terminal; ~~and~~

processing circuitry, coupled to the hardware upgrade processor, for receiving

interactive input from the subscriber, for interpreting the received interactive input, for

generating responses based on the received interactive input and for providing the generated

responses to the microprocessor of the set top terminal; and

memory, coupled to the hardware upgrade microprocessor, for storing data

therein;

wherein the hardware upgrade is a card inserted into the card receiving slot of

the set top terminal, the hardware upgrade microprocessor being coupled to a modulator and

demodulator to add a data modulation and demodulation function to the set top terminal such

that data may be retrieved by the modem of the hardware upgrade from the one or more

headends and stored in the memory of the hardware upgrade, wherein the data received by

the modem of the hardware upgrade comprises information from an interactive service for

accessing an on-line database thereby allowing a user to use the set top terminal to engage in

actual transactions using two-way communications over the modem of the hardware upgrade

with the interactive service via submenus provided by the hardware upgrade microprocessor

as an overlay to a program displayed by the microprocessor of the set top terminal, and

wherein the television program delivery system is a cable television program

delivery system comprising an operations center, the operations center transmitting one or

more of the programs to one or more headends and wherein the hardware upgrade

microprocessor ~~upgrade~~ processes data and instructions stored in the memory of the

hardware upgrade to provide enhanced functional capabilities for the set top terminal and to

process subscriber inputs received from the set top terminal.


25-27. (Canceled).


28.  (Original)  The system of claim 24 wherein the television program

delivery system is a satellite broadcast system.


29.  (Original)  The system of claim 24 wherein the terminal is an HDN

terminal.


30-41  (Canceled)

42.     (Currently Amended) A method for delivering television programs through a television program delivery system with menu selection of programs, comprising:

receiving subscriber input through a set top terminal interface within a set top terminal, the set top terminal having a microprocessor and microprocessor instructions for prompting generation of menus;

providing an interface signal path for providing communication with a microprocessor of the set top terminal for routing subscriber input provided by the microprocessor of the set top terminal and providing data to the microprocessor of the set top terminal;

receiving, in a card receiving slot of the set top terminal, a hardware upgrade having a hardware upgrade microprocessor and a hardware upgrade modem in a card receiving slot of the set top terminal, the hardware upgrade microprocessor being directly connected to the microprocessor of the set top terminal by the interface signal path when the hardware upgrade is inserted into the card receiving slot [[ , ]] of the set top terminal and communicating with the microprocessor of the set top terminal for receiving and processing subscriber input provided by the microprocessor of the set top terminal and for providing data to the microprocessor of the set top terminal;

providing communication via the hardware upgrade modem between the hardware upgrade and one or more headends, wherein the set top terminal receives television program signals based on the subscriber input received from the microprocessor of the set top terminal;

receiving interactive input from the subscriber at processing circuitry of the hardware upgrade, for interpreting the received interactive input, for generating responses based on the

received interactive input and for providing the generated responses to the microprocessor of

the set top terminal;

coupling the hardware upgrade microprocessor ~~being coupled~~ to a modulator and

demodulator to add a data modulation and demodulation function by using the hardware

upgrade microprocessor to communicate via the modem of the hardware upgrade with one or

more headends to receive data based on the subscriber input received by the hardware

upgrade microprocessor from the microprocessor of the set top terminal;

storing data in memory of the hardware upgrade;

passing received data to the set top terminal via the interface signal path;

providing enhanced functional capabilities to the set top terminal using the hardware

upgrade microprocessor;

allowing a user to use the set top terminal to engage in actual transactions using two-

way communications via the modem of the hardware upgrade through ~~the data modulation~~

~~and demodulation via~~ submenus provided by the hardware upgrade microprocessor as an

overlay to a program displayed by the microprocessor of the set top terminal; and

displaying television program and/or information based on the received data.


43.     (Original)     The method of claim 42 wherein the received data comprises

information concerning the television program.


44.     (Canceled).

45.     (Previously Presented)        The method of claim 42 wherein the providing a data modulation and demodulation function using the hardware upgrade microprocessor to communicate further comprises:

communicating with at least one interactive service.


46.     (Original)     The method of claim 45 wherein the interactive service is outside of the television program delivery system.


47.     (Original)     The method of claim 45 wherein the interactive service is selected from a group consisting of home shopping, airline reservations, news, financial information classified advertisements, home banking, and interactive teletext.


48.     (Previously Presented)        The method of claim 42 wherein the providing a data modulation and demodulation function using the hardware upgrade microprocessor to communicate further comprises:

communicating with at least one on-line database.


49.     (Original)     The method of claim 48 wherein the on-line database is outside of the television program delivery system.


50.     (Original)     The method of claim 48 wherein the on-line database contains data related to one or more applications selected from a group consisting of home shopping, airline reservations, news, financial information, classified advertisements, home banking, and interactive teletext.

51-55. (Canceled)

56. (Previously Presented) The method of claim 42 wherein the received data concerns one or more applications selected from a group consisting of games, education, encyclopedias, reference, and economics.

57-58. (Canceled)

59. (Original) The method of claim 42 further comprising:

generating a menu on a television, wherein the subscriber input comprises menu selections.

60-65. (Canceled)